

Wednesday, August 24, 2016 11:35:56 AM

150121

Page 1

Accept

N900040100

```
Setup Start *NS1*
Stop *NS2*
```

1

Cust Item ID:
Customer:

Approvals: **Process Plan:** DAS 21 **Date:** AUG 24 2016 **Tooling:** _____ **Date:** _____
 QC: 9-89 **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
							Lead hand / Supervisor Approval Verification																		
							QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____																			

Work Order ID 150121

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Item ID: DSI 9052-013**Revision ID:****Item Name:** AS350/AS355 Basket Quick Release Pip Pins**Start Date:** 8/22/2016 **Start Qty:** 1.00**Required Date:** 8/24/2016 **Req'd Qty:** 1.00**Reference:****Accept*****N900040100*****Setup****Start*****NS1*****Stop*****NS2*****Cust Item ID:****Customer:*****1******1*****Run****Start*****NR1*****Stop*****NR2*****Approvals:****Process Plan:** _____**Date:** _____**Tooling:** _____**Date:** _____**QC:** _____**Date:** _____**SPC (Y/N):** _____**Date:** _____**Sequence ID/
Work Center ID****Operation
Description****Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

130

130

Packaging

Packaging

Packaging

MemoIdentify and pack for shipping as per PPP D9052-013 Location: 6122

0.00

0.00

1DAS
27
9-89DAS
28
9-89

OCT 12 2016

140

140

QC

Quality Control

QC21- Final Inspection - Work Order Release

Memo

0.00

0.02

DAS
21
9-89

OCT 12 2016

VS 16/10/12

DAS
21
9-89

OCT 12 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				

Picklist Print

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Work Order ID: 150121

Parent Item: DSI 9052-013

Parent Item Name: AS350/AS355 Basket Quick Release Pin Pins

150121

DSI 9052-013

Start Date: 8/22/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A02.05.15New IssueNG

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

BLRS-010		Purchased	No			110	Each	5.0000	1	1			
RI RS-010									**				
Quick Release Pin (1/4" x 1")													
DAS 27 9-89				<u>Location</u>				<u>Loc Qty</u>					
				FG				4					
				121374				4					
				ST557				1					
				m132518				1					

BLRS-020		Purchased	No			110	Each	4.0000	3	3			
RI RS-020									**				
Quick Release Pin (1/4" x 1.5")													
DAS 27 9-89				<u>Location</u>				<u>Loc Qty</u>					
				ST557				4					
				m135439				4					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-607 REV. F OR LATER REV.
(REF. CANADIAN STC: SH94-14, REF. FAA STC: SR00213NY)
AND TO AMEND INSTALLATION DRAWING D350-602 REV. E OR LATER REV.
(REF. CANADIAN STC: SH93-97, REF. FAA STC: SR01144NY)

PURPOSE: TO ALLOW SUBSTITUTION OF THE BASKET/ POD ATTACHMENT BOLTS WITH QUICK RELEASE PINS

THE AN4-12A / AN4-15A / AN4-16A BOLTS USED ON D2230-1 CLAMPS MAY BE REPLACED WITH STAINLESS STEEL POSITIVE LOCKING QUICK RELEASE PINS WITH A MINIMUM DOUBLE SHEAR STRENGTH OF 2400 LBS AND 0.25 INCH DIAMETER.

BOLT	MIN GRIP	POSSIBLE QUICK RELEASE PIN REPLACEMENT
AN4-12A	1.0"	AVIBANK: BLC4B10S, BLC4TA10S, BLC4R10S, BLC4LA10S MS NUMBER: MS17984C410, MS17985C410, MS17986C410, MS17987C410 REID: BLRS-010, BLBS-010
AN4-15A / AN4-16A	1.3"	AVIBANK: BLC4B13S, BLC4TA13S, BLC4R13S, BLC4LA13S MS NUMBER: MS17984C413, MS17985C413, MS17986C413, MS17987C413 REID: BLRS-020, BLBS-020

THE FOLLOWING OPTIONAL KITS ARE AVAILABLE FROM DART TO PROVIDE QUICK RELEASE CAPABILITY. DART HELI-UTILITY-BASKETS™ D350-607-041 @ CHG 008, D350-607-043 @ CHG 005, D350-607-045 @ CHG 003, D350-607-047 @ CHG 003, OR LATER CHANGE NUMBERS, OR KITS MODIFIED PER SERVICE INSTRUCTION DSI 9342 USE AN4-15A BOLTS AND SHOULD PURCHASE THE DSI-9052-013 KIT. EARLIER CHANGE NUMBERS THAT HAVE NOT BEEN MODIFIED PER SERVICE INSTRUCTION DSI 9342 USE AN4-12A BOLTS AND SHOULD PURCHASE THE DSI-9052-011 KIT.

QTY -011	QTY -013	PART NUMBER	DESCRIPTION
X		DSI-9052-011	QUICK RELEASE KIT, FOR D350-607-041 (CHG ≤007) / -043 (CHG ≤004) / -045 (CHG ≤002) / -047 (CHG ≤002)
	X	DSI-9052-013	QUICK RELEASE KIT, FOR D350-602-011/-013/-014 & D350-607-041 (CHG 008) / -043 (CHG 005) / -045 (CHG 003) / -047 (CHG 003)
4	1	BLRS-010	QUICK RELEASE PIN (1.0" GRIP)
	3	BLRS-020	QUICK RELEASE PIN (1.5" GRIP)

IT IS ACCEPTABLE TO LEAVE THE D2230-1/-3 CLAMPS INSTALLED ON THE CROSSTUBES WHEN THE BASKET OR POD IS REMOVED. WEIGHT & BALANCE, FOR CLAMPS ONLY, IS 1.8lb (0.82kg) @ STA 135in (3.43m) & BL ±36in (±0.91m).

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-0-01

APPROVED
BY: 
D. SHEPHERD (DE # 02)

DATE: 09.06.23
CERT. NO.: SH94-14 / SH93-97
ISSUE NO.: 4/4

SHIP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
150121
MCS
160824

E	-013 KIT NOW APPLICABLE TO NEW D350-607 KITS	CP	09.06.23
D	ADD CLAMPS ONLY NOTE	KJ	04.03.23
C	ADD DSI 9052-013	CP	03.12.11
B	ADD PART NUMBERS	BW	96.11.13
A	NEW ISSUE	MM	96.11.04
REV.	DESCRIPTION	BY	DATE
DESIGN	MM	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JP		
CHECKED	MS	DRAWING NO.	REV. E
MFG. APPR.	N/A	DSI 9052	SHEET 1 OF 1
APPROVED	MM	TITLE	SCALE
DE APPR.	MM	QUICK PIN REPLACEMENT	NTS
DATE	09.06.23	COPYRIGHT © 1996 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	